NON-PUBLIC?: N
ACCESSION #: 9509050146
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Grant Gulf Nuclear Station, Unit 1 PAGE: 1 OF 3

DOCKET NUMBER: 05000416

TITLE: Reactor Scram Due to Turbine/Generator Trip
EVENT DATE: 07/30/95 LER #: 95-010-00 REPORT DATE: 08/28/95

OTHER FACILITIES INVOLVED: N/A DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION:
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: Charles Holifield / Licensing
Engineer TELEPHONE: (601) 437-6439

COMPONENT FAILURE DESCRIPTION:
CAUSE: SYSTEM: COMPONENT: MANUFACTURER:
REPORTABLE NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

At 1148 on July 30, 1995, a reactor scram occurred due to a Main Turbine/Generator trip. The Main Turbine/Generator trip resulted in a turbine control valve fast closure and turbine stop valve closure actuation immediately followed by a full Reactor Protection System (RPS) actuation.

Operators determined that the generator tripped on Generator Current Differential. The root cause of the scram was the failure of a current transformer on the 'A' phase for one of the generator output breakers. The current transformer failure generated an 'A' phase Unit Differential Protective Relay trip.

Corrective actions include an inspection/test of all equipment monitored by the unit differential relay scheme, replacement in kind of the failed current transformer and a failure analysis of the current transformer to

be performed by the transformer vendor to determine the failure mode.

The RPS actuation is reportable pursuant to 10CFR50.73(a)(2)(iv). Emergency Core Cooling Systems did not inject and safety relief valves did not actuate during the plant transient. The health and safety of the general public were not compromised as a result of this event.

END OF ABSTRACT

A. Reportable Occurrence

A reactor scram occurred on July 30, 1995, due to the automatic actuation of the Reactor Protection System (RPS) JC!. The RPS actuation is reportable pursuant to 10CFR50.73(a)(2)(iv).

B. Initial Conditions

At the time of the event, the reactor was in OPERATIONAL CONDITION 1 with reactor power at 100 percent. Reactor temperature, reactor pressure vessel (RPV) pressure and RPV water level were at approximately 532 degrees F, 1025 psig and 36 inches, respectively.

C. Description of Occurrence

At 1148 on July 30, 1995, a reactor scram occurred due to a Main Turbine/Generator trip. The Main Turbine/Generator trip resulted 5 a turbine control valve (TCV) fast closure and turbine stop valve (TSV) closure actuation immediately followed by a full RPS actuation.

Additionally, because of the fast closure of the TCVs and TSVs, the reactor high pressure scram setpoint of 1064.7 psig was reached. Bypass valves opened to control pressure. RPV level shrink resulted in a loot level scram signal at 11.4 inches but was quickly restored using feedwater. Reactor pressure remained stable on the bypass valves.

Operators determined that the generator tripped on Generator Current Differential as indicated by a flag on the 'A' phase unit differential relay.

D. Apparent Cause

The root cause of the scram was the failure of a current transformer

(CT) on the 'A' phase for one of the generator output breakers. The CT failure generated an 'A' phase Unit Differential Protective Relay trip.

E. Corrective Actions

o All equipment monitored by the unit differential relay scheme was inspected and/or tested but revealed no abnormalities.
o The failed CT was replaced in kind and returned to service.
o To determine the failure mode, the CT was sent to the vendor for a failure analysis.

F. Safety Assessment

This event did not impair the ability of any system to perform its intended safety function. Although the Emergency Core Cooling System (ECCS) was available to perform its safety function, ECCS did not inject during the event. Additionally, the safety relief valves did not actuate during the plant transient. The health and safety of the general public were not compromised as a result of this event.

G. Additional Information

The CT was installed during refueling outage seven (RFO7) in conjunction with a breaker replacement and was in service for about two and a half months prior to failure. Saturation tests were successfully performed on the CT immediately following the RFO7 installation.

As a result of this scram, Incident Report 95-07-08, Material Nonconformance Report O239-95 and Root Cause Analysis Report RCDL#95-22 were generated.

Energy Industry Identification System (EIIS) codes are identified in the text within brackets !.

ENTERGY Entergy Operations, Inc.
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Tel 601-437-2800

C. R. Hutchinson
Vice President
Operations
Grand Gulf Nuclear Station

August 28, 1995

U.S. Nuclear Regulatory Commission
Mail Station P1-037
Washington, D.C. 20555

Attention: Document Control Desk

SUBJECT: Grand Gulf Nuclear Station, Unit 1
Docket No. 50-416
License No. NPF-29
Reactor Scram Due to Turbine/Generator Trip
LER 95-010-00

GNRO-95/00102

Gentlemen:

Attached is Licensee Event Report (LER) 95-010 which is a final report.

Yours truly

CRH/CDH
attachment

cc: Mr. J. E. Tedrow (w/a)
Mr. H. W. Keiser (w/a)
Mr. R. B. McGehee (w/a)
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